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09/389,942	09/03/1999	THOMAS W. MEYER		6071

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CONCORD, NH 03301

EXAMINER

INGBERG, TODD D

ART UNIT	PAPER NUMBER
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2124

DATE MAILED: 02/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/389,942

Applicant(s)

MEYER ET AL.

Examiner

Todd Ingberg

Art Unit

2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 2124

DETAILED ACTION

Claims 1 - 38 have been examined.

Preliminary amendment adding claims 37 and 38 was received on January 10, 2000.

Information Disclosure Statement

1. The information disclosure statement (IDS) filed September 17, 1999 has not been considered. A letter indicating an IDS was filed but the form PTO-1449 and the actual disclosure are missing.

Drawings

2. New formal drawings are required in this application because of the reasons stated on PTO-948. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The abstract of the disclosure is objected to because the page numbers are missing. Correction is required. See MPEP § 608.01(b). The following Specification errors will require the Applicant to locate the page and line number.

4. The Applicant has used URLs in the Specifications. The URLs must be deleted and any incorporation by reference must be submitted on a PTO-1449.

Art Unit: 2124

5. The use of the trademark RealAudio, Quicktime, Macromedia, Shockwave, Visual Basic and JAVA has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology. The USPTO.gov website can be used to determine

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 U.S.C. § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claim 15 is rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. the ability to invent a process of wherein the embedding is effected at substantially greater than 300 bits/second of executable code in the media file. critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). The disclosure fails to clearly and concisely provide a means of teaching that will support the claim that the speed will be greater than 300 bits/second of executable code in the media file.

Art Unit: 2124

8. Claim 4 is rejected under 112 first paragraph because the Specification does not teach all possible computer program formats. The limitations are not supported by the Specification's enablement.

9. Claim 11 is rejected under first paragraph because the means for providing backward compatibility are not clearly defined.

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Regarding claim 3 , ends with the phrase "thereof" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

11. The term " any computer program format" in claim 4 is a relative term which renders the claim indefinite. One of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

12. Claim 11 is rejected under second paragraph because limitations no clear and discernable meaning.

Claim 11

The process of claim 1 wherein said embedding of the executable code into the media file is effected seamlessly with backward compatibility with the media file format, and is unobtrusive to a user of the playback. The limitations are vague and indefinite.

Art Unit: 2124

13. Claims 21 and 32 are rejected under second paragraph because limitations no clear and discernable meaning. The limitations are vague and indefinite.

The process of claim 13 wherein the executable code is transformed into a bit stream and inserted and embedded at selected locations in the media file identified as locations where minor changes to the media file content produce minimal effects during playback.

Claim Rejections - 35 U.S.C. § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Art Unit: 2124

15. Claims 1 - 6, 8 - 11, 16, 37 - 38 are rejected under 35 U.S.C. 102(a,b,e) as being anticipated by **Doyle** as per USPN # 5,838,906 (**Doyle et al**) published November 17, 1998 (filed October 17, 1994).

Claim 1

Doyle teaches a process for supplementing pre-prepared media digital file content to be performed by a digital playback apparatus (**Doyle**, Abstract - browser) with supplemental digital program content (**Doyle**, Abstract and figure on front of patent data objects), that comprises, preparing such supplemental digital program content in the form of executable code (**Doyle**, Abstract, executable); and embedding the executable code into the pre-prepared media file for execution by the playback apparatus supplementary to the playback of the pre-prepared media-file content (**Doyle**, Abstract, embedded executable for playback in browser).

Claim 2

The process of claim 1 wherein the media file has not been pre-prepared to contain such executable code, and the code is seamlessly embedded in the media file as supplemental digital program sequences of executable code. As per claim 1.

Claim 3

The process of claim 2 wherein the media digital file program content has been pre-prepared from the group consisting of audio, video, image, 3-D, database information and combinations thereof. As per claim 1 and col 11, lines 10 - 16 the MPEG standard by definition.

Claim 4

Art Unit: 2124

The process of claim 3 wherein the sequences of executable code are prepared in any computer program format. In view of 112 rejection above, the Doyle invention runs in a browser any computer running the browser can run the Doyle invention as per Abstract.

Claim 5

The process of claim 4 wherein the sequences of executable code are prepared from the group consisting of computer-programmed Java class files, Macromedia Shockwave, Flash, binary executables, byte codes, Visual Basic and Java Script. A Markush claim interpretation Doyle teaches an executable meeting the binary executable format as per Abstract.

Claim 6

The process of claim 4 wherein the program content of said sequences of executable code are selected as one or more of graphic, interactive, and e-commerce content. A Markush claim interpretation. Doyle teaches executable and the graphic as per Abstract.

Claim 8

The process of claim 3 wherein the media file has been pre-prepared to comprise audio program format and the embedded executable code is prepared to provide image supplementation. (Doyle, Abstract)

Claim 9

The process of claim 1 wherein the embedding in the media file is effected at predetermined time intervals. (Doyle, transmitting of frame data as per Abstract)

Claim 10

Art Unit: 2124

The process of claim 1 wherein the execution of the code is synchronized with the playback of the media files. (**Doyle**, Abstract, after launching user can interact with it - more ability than that is claimed)

Claim 11

The process of claim 1 wherein said embedding of the executable code into the media file is effected seamlessly with backward compatibility with the media file format, and is unobtrusive to a user of the playback. The Doyle patent does not mention a version dependency on MPEG it is the interpretation the claim limitations are met by Doyle.

Claim 16

The process of claim 1 wherein the media file is an MPEG audio file containing an MP3 audio stream. As per claim 3 MPEG by standard and the evolution of said standard.

Claim 37

A process for seamlessly embedding supplementary program content into digital media streams during execution of such streams by digital media content presenting systems, that comprises, providing supplementary digital program content in the form of executable/code; embedding the executable code into the digital stream; decoding the encoded code during the presenting of the content of the stream by the system; and presenting the supplementary program content of the decoding in response to such decoding during the presenting of the stream content by the system.

As per claims 1 , 3 and 8 .

Claim 38

Art Unit: 2124

The process of claim 37 wherein the embedding, decoding and presenting are effected by software control of a computer system; with the presenting effected as playing and/or viewing at a computer screen. As per claim 10.

Claim Rejections - 35 U.S.C. § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 12, 17 - 20, 24, 27 - 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN # 5,838,906 (**Doyle et al**) published November 17, 1998 (filed October 17, 1994) in view of the ID3Lib 3.05 by Dirk **Mahoney** published November 22, 1998 (a library based on the informal standard ID3v2-3.0).

Claim 12

The process of claim 11 wherein a checksum is used during the execution of the code at the playback, to verify that the embedded executable code has been extracted correctly. Doyle teaches unpacking or decompressing col 3, lines 33 - 55 but does not explicitly teach the use of checksums. **Official Notice** is taken that the use of checksums in data compression and decompression is old and well known and one of ordinary skill in the art at the time of invention would have known to employ the use of checksums because they are a reliable means of determining the validity of an uncompressed file. (**NOTE** - Mahoney, page 5

Art Unit: 2124

ID3_Tag::SetCompression() teaches zlib compression standard it is possible the Applicant is claiming part of an industry standard).

Claim 17

The process of claim 16 wherein, in the encoding process, the executable code is unsynchronized from synchronization bytes of the audio stream and encapsulated in ID3v2 format before insertion at the beginning of the MP3 audio stream from the audio file. (**Mahoney**, interpreted as use of informal standard ID3v2-3.0 - pages 3 - 4 , synch and unsync as part of the standard)

Claim 18

The process of claim 16 wherein, in the encoding process, executable code bits are inserted at the end of the audio file data in each audio frame to encode ancillary data. (**Mahoney**, page 8, ID3_Tag::Link(), "mysong.mp3" the myTag example).

Claim 19

The process of claim 18 wherein the MPEG audio file is recompressed to ensure room for executable code at the end of the frames. (**Mahoney**, page 8, ID3_TsetCompression(true), the myTag example).

Claim 20

The process of claim 16 wherein the executable code is encoded in private data packets for the insertion and embedding of new private data packets into the existing MPEG file. (**Mahoney**, interpreted as use of informal standard ID3v2-3.0)

Claim 24

Art Unit: 2124

Doyle teaches a system for flexibly adding supplemental digital program content to the playback of a pre-prepared media digital file by digital playback apparatus, comprising, means for modifying the pre-prepared media file to embed sequences of executable code therein representing such supplemental program content; means provided in the digital playback apparatus for decoding the embedded code during playback of the modified media file at the digital playback apparatus; and, in addition to means for playing back the pre-prepared content of the media file, means provided at the digital playback apparatus responsive to the decoding for also presenting thereat the supplemental program content. **Mahoney** teaches the adding supplemental digital program content with (**Mahoney**, interpreted as use of informal standard ID3v2-3.0, page 5 Mytag example). Therefore, it would have been obvious for one of ordinary skill in the art at the time of invention to combine the multimedia invention of Doyle with the ability to send additional data with the stream because the additional data can provide annotations about the content making the content more understandable.

Claim 27

The system of claim 24 wherein the media file is an MPEG audio file containing an MP3 audio stream. As per claim 16.

Claim 28

The system of claim 27 wherein the modifying means comprises means for unsynchronizing the executable code from synchronization bytes of said audio stream and encapsulating the code in

Art Unit: 2124

ID3v2 format before insertion at the beginning of the MP3 audio stream from the audio file. (**Mahoney**, interpreted as use of informal standard ID3v2-3.0, page 4, sync and unsync)

Claim 29

The system of claim 27 wherein, in the encoding process, means is provided for inserting executable code bits at the end of the audio file data in each audio frame to encode ancillary data. As per claim 18.

Claim 30

The system of claim 29 wherein the MPEG audio file is recompressed to ensure room for executable code at the end of the frames. (**Mahoney**, interpreted as use of informal standard ID3v2-3.0, page 5, compression)

Claim 31

The system of claim 27 wherein means is provided for encoding the executable code in private data packets for the insertion and embedding of new private data packets into the existing MPEG file. (**Mahoney**, interpreted as use of informal standard ID3v2-3.0, claiming a record definition of the standard)

18. Claims 13 - 15 and 21- 22, and 32 - 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN # 5,838,906 (**Doyle et al**) published November 17, 1998 (filed October 17, 1994) in view USPN 6,185,683 (**Ginter et al**) filed December 28, 1998 and a continuation of filed application on February 13, 1995.

Claim 13

Art Unit: 2124

The process of claim 1 wherein the embedding is effected by steganographic techniques. **Ginter** teaches the use of steganography in electronic commercial transactions (**Ginter** , Abstract).

Therefore, it would have been obvious to one of ordinary skill in the field to combine the teaching of Doyle and Ginter because steganography makes transactions more secure.

Claim 14

The process of claim 13 wherein the encoding of the executable code in the media file is effected by one of low-bit encoding and frequency-domain low-bit encoding. Inherent in MPEG standard.

Claim 15

The process of claim 13 wherein the embedding is effected at substantially greater than 300 bits/second of executable code in the media file. This claim was rejected under 35 U.S.C. 112 first paragraph for enablement.

Claim 21

The process of claim 13 wherein the executable code is transformed into a bit stream and inserted and embedded at selected locations in the media file identified as locations where minor changes to the media file content produce minimal effects during playback. As per claim 1.

Claim 22

The process of claim 1 wherein, prior to the encoding embedding of the executable code into the media file, the media file is subjected to a digital watermarking process. **Ginter** teaches the use of digital watermarking in electronic commercial transactions (**Ginter** , Abstract). Therefore, it

Art Unit: 2124

would have been obvious to one of ordinary skill in the field to combine the teaching of Doyle and Ginter because digital watermarking makes transactions more secure.

Claim 32

The system of claim 24 wherein the modifying means comprises steganographic coding means and wherein means is provided for transforming the executable code into a bit stream and for inserting and embedding bits at selected locations in the media file, identified as locations where minor changes to the media file content produce minimal effects during playback. As per claim 13

Claim 33

The system of claim 24 wherein means is provided, operable prior to the encoding embedding of the executable-code into the media file, for subjecting the media file to a digital watermarking process. As per claim 22.

19. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Doyle and Mahoney as applied to claim 24 above, and further in view of Ginter.

Claim 25

The system of claim 24 wherein the executable code sequences are selected to contain one or more of graphic, interactive and e-commerce program content. Doyle Abstract as per claims 6 and 12. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Doyles multimedia invention and Mahoneys toolkit for an

Art Unit: 2124

emerging standard in multimedia with Ginter because secured transactions make communications more reliable.

20. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Doyle, Mahoney and Ginter as applied to claim 25 above, and further in view of Web Advertising.

Claim 26

The system of claim 25 wherein said program content includes one or more of advertising, transactional advertising, games, polls, contests, interactive music videos and e-commerce. As per claim 35. It would have been obvious to combine the teaching of Doyle's multimedia invention and Ginter's secure transaction for e-commerce and Advertising on the Web by changing the content to be advertising because advertising can be profitable.

21. Claims 7, 23, 35 - 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doyle in view of "What Makes People Click Advertising on the Web by Jim Sterne published August 22, 1997.

Claim 35

Doyle teaches a method of conducting advertising and e-commerce business through an expanded use of digital media playing apparatus, that comprises, seamlessly embedding in digital entertainment media files pre-prepared for entertainment playback by said apparatus (**Doyle**, as per claim 1), executable code representing supplementary digital advertising and e-commerce business solicitation program content; and modifying said apparatus to enable also decode of said code by the apparatus so as to enable playback at said apparatus of said business

Art Unit: 2124

solicitation program content as a supplement to the playback of the entertainment file, and without affecting the backwards compatibility of the file format, thereby to provide business solicitation opportunities not previously provided at such apparatus. However, Doyle teaches the multimedia application of a medial nature not purely advertising. It is "Advertising on the Web" that teaches Advertising on line and receiving an instant response (Advertising on the Web, page 7, Instant Response). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teaching of Doyle and "Advertising on the Web" and target the content of the multimedia to be pure advertising, because advertising can be profitable.

Claim 36

The method of claim 35 wherein the media file contains audio MPEG formats and said playback apparatus is adapted for playing MP3 data streams of such formats. as per claim 16.

Claim 7

The process of claim 6 wherein said program content includes one or more of advertising, transactional advertising, interactive music videos, and e-commerce. as per claim 35

Claim 23

The process of claim 1 wherein the pre-prepared media file is an MP3 file and the executable code is seamlessly embedded therein and prepared to provide the supplemental program content

Art Unit: 2124

selected from the group consisting of transactional advertising, games, polls, contests, interactive music videos and e-commerce. As per claim 35.

22. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Doyle and Mahoney as applied to claim 24 above, and further in view of Web Advertising.

Claim 34

The system of claim 24 wherein the pre-prepared media file is an MP3 file and the executable code is seamlessly embedded therein and prepared to provide supplemental program content selected from the group consisting of transactional advertising, games, polls, contests, interactive music videos and e-commerce. As per claim 35. Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Doyle, Mahoney and web advertising because changing the content to advertising can be profitable.

Conclusion

23. Many of the claims have enablement problems or contain vague and indefinite limitations. Other claims appear to be claiming inherent parts of industry standards.

Correspondence Information

24. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to **Todd Ingberg** whose telephone number is **(703) 305-9775**. The Examiner is working a Maxi-Flex schedule and can be reached Monday through Friday. If attempts to reach the examiner by telephone are unsuccessful, the **Examiner's Supervisor**,

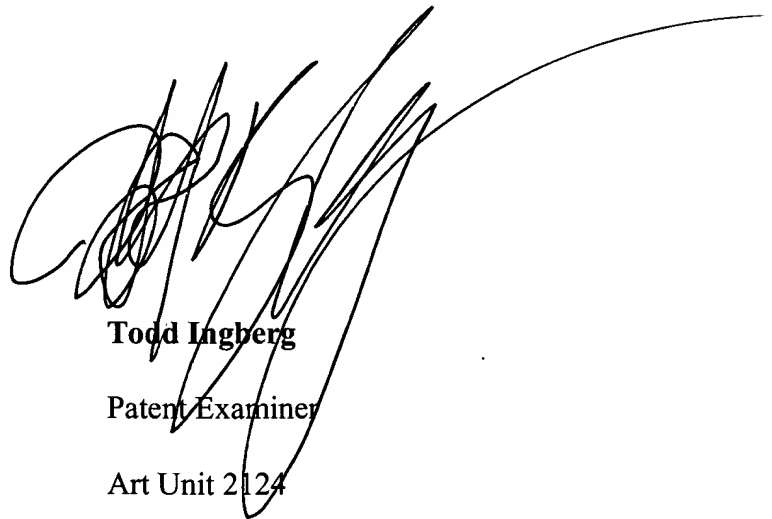
Art Unit: 2124

Kakali Chaki be reached at **(703)305-9662**. Any response to this office action should be mailed to: **Director of Patents and Trademarks Washington, D.C. 20231**, or **Hand-delivered** responses should be brought to **Crystal Park II, 2121 Crystal Drive Arlington, Virginia, (Receptionist located on the fourth floor)**, or **faxed**. The following **fax numbers** apply:

Official (703) 746 - 7239

Non Official/ Draft (703) 746 -7240

After Final (703) 746 - 7238

A large, stylized handwritten signature in black ink, appearing to read 'Todd Ingberg', is written over the typed name and title.

Todd Ingberg

Patent Examiner

Art Unit 2124

February 21, 2003